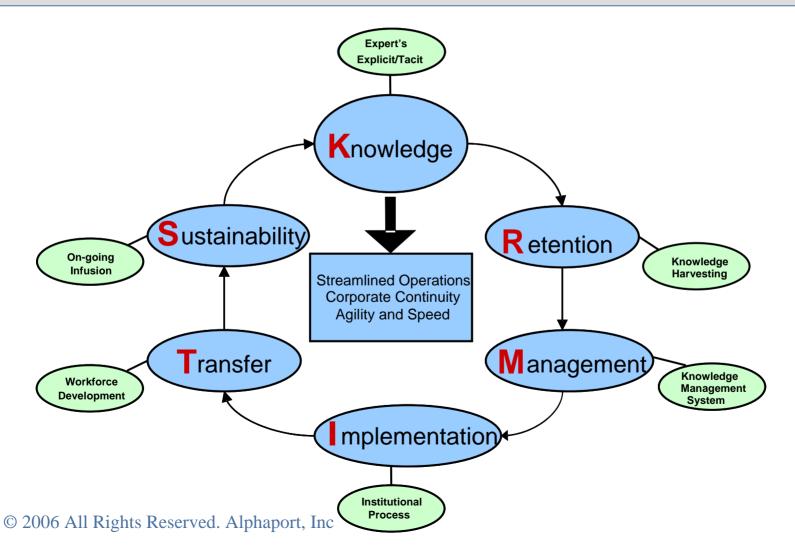




#### **KRMITS**<sup>sm</sup>





# **KRMITS**<sup>sm</sup>: **K**nowledge Element

Knowledge ⇒ Retention ⇒ Management ⇒ Implementation ⇒ Transfer ⇒ Sustainability

• Elevate "at-risk" knowledge to the status of a valued & threatened resource

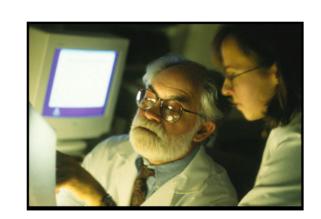
- Identify explicit and tacit knowledge of the critical-to-success retired expert – a virtually untapped resource
- Define criteria to evaluate and categorize the knowledge available from the appropriate retiree pool
- Defend the threatened resource by harnessing appropriate retiree expertise





## **KRMITS**<sup>sm</sup>: **R**etention Element

- Knowledge gap analyses are performed to identify areas that will be at risk due to loss of personnel
- Knowledge can be harvested using mentoring of protégés,
  video interviews, and expert profiling techniques
- **KRMITS**<sup>sm</sup> provides a methodical approach to identifying and retaining critical knowledge





# **KRMITS**<sup>sm</sup>: Retention Element Example

- **KRMITS** applied at NASA GRC to capture space nuclear reactor engineering expertise
  - Identified personnel critical to the area
  - Conducted risk analysis and identified critical mission assurance needs
  - Created state-of-the-art knowledge database for fission reactor & fuel technology for deep space missions
  - Identified method for quality assurance for critical parts using resources at Ohio State University (OSU) nuclear reactor facility
    - Completed series of tests and validated methodology
  - Developed and delivered curriculum, based on expert tacit knowledge, to civil servant workforce assigned to Project Prometheus
  - Initiated education outreach for OSU and Univ. of Cincinnati students

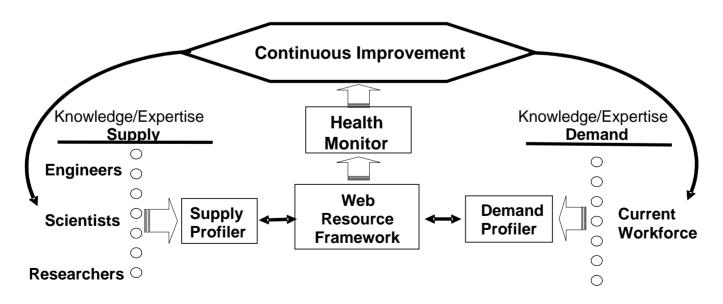


## **KRMITS**<sup>sm</sup>: Management Element

Knowledge ⇒ Retention ⇒ Management ⇒ Implementation ⇒ Transfer ⇒ Sustainability

#### Virtual workplace to allow easy access to our resources

- Web-based portal provides framework
- Communities of Practice
- Cataloging of content





# **KRMITS**<sup>sm</sup>: Implementation Element

- Provides structure to execute planning & coordination of the foregoing elements of the **KRMITS**<sup>sm</sup> model. For example:
  - Identify & develop champions within user organizations
  - Develop institutional processes to foster rapid execution of tasks (e.g. use of standard training templates for Subject Matter Expert – SME courses)
- Requires aggressive outreach function to establish & implement a broad awareness of and recognized need for these services and capabilities



## KRMITS<sup>sm</sup>: Transfer Element

Knowledge ⇒ Retention ⇒ Management ⇒ Implementation ⇒ Transfer ⇒ Sustainability

- Specialized, targeted courses use retired experts to impart practical knowledge & lessons learned that directly impact today's programs to augment knowledge transmitted by traditional instruction
- Flexible training formats include one-onone, one-to-many in classroom, and distance learning via Internet
- KRMITS<sup>sm</sup> approach stresses intimate involvement of SME instructors to infuse "vitality", depth, and credibility into the training content
- Provides unique approach to career development

We use only those who have really "been there, done that"



### **Engineering Transfer Example**

- Four day course on Launch Vehicles with Emphasis on Upper Stages presented to GRC to support Vision for Space Exploration
  - Utilized Alphaport retiree experts in conjunction with instructors from Launchspace
  - Two sessions given to classes of 30 participants each
    - Third session for 60 students scheduled for March 27
  - Mix of project, engineering, and research personnel
  - Extremely positive feedback on quality of course, especially GRC retiree real-life examples, scenarios, and experiences
  - Alphaport received letter of commendation from GRC Chief of Organization Development and Training Office



# **KRMITS** sm: Sustainability Element

- Provides a **structured** approach to continuous re-infusion of retiree knowledge
  - Utilizes the people with the most experience and knowledge to drive workforce development and continually infuse this expertise back into the pipeline
  - Trains/retrains and mentor workforce
  - Establishes an Educational Career Awareness and Needs Assessment



